CLAIMS

1. A method for implementing a resonant circuit comprising of an input signal connected to the input of a transmission line. The output of the transmission line is connected to a capacitive load. The input signal is also connected to a parallel capacitive load.

2. The method of claim 1 wherein the transmission line is implemented off-chip.
3. The method of claim 1 wherein the transmission line is implemented on a silicon or other semiconductor substrate.
4. The method of claim 1 wherein the transmission line is implemented on the package substrate.
5. The method of claim 1 wherein the transmission line is implemented on a PCB board.
6. The method of claim 1 wherein the transmission line is implemented as a co-planar waveguide.
7. The method of claim 1 wherein the transmission line is implemented as a microstrip line.
8. The method of claim 1 wherein the transmission line is implemented as a stripline transmission line.
9. The method of claim 1 wherein the transmission line is implemented as other known transmission line types.

10. The method of claim 1 wherein the said capacitive load is tunable.
11. The method of claim 1 wherein the said parallel capacitive load is tunable.
12. The method of claim 1 wherein the transmission line length is one quarter the wavelength of the wavelength at the resonant frequency.
13. The method of claim 1 wherein the transmission line length is n*lambda + n*lambda/4, where lambda is the wavelength at the resonant frequency.
14. The method of claim 1 wherein the circuit component values satisfy the relationship, 2*pi*fo=1/sqrt(Co*CL*Zo^2), where fo is the resonant frequency, Co is said parallel capacitive load value, CL is said capacitive load value, and Zo is the characteristic impedance of said transmission line.